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TITLE: Method of responding to resource requests in a trunked communication system without call-handoff

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In addition to a directional vector, the communication units current location (e.g., location 205) must be known by the controller at the communication site. This information can be obtained using well known techniques such as Loran-C, global positioning systems (GPS), etc. With regard to the information required to determine a directional vector 208, the present invention contemplates two alternate embodiments. A first embodiment requires that the communication unit has the ability to determine its current speed and direction, and transmit that information to the communication site. A second embodiment requires that the communication site keeps historical location

information, and derives a probable directional vector based on two or more successive location points (i.e., a relatively simple calculation can be made to estimate a nominal speed and direction for a communication unit traveling from one point to another within a known time). It should be noted that either of these directional vectors can be updated on a continual basis to provide a more accurate indication of the communication units movement about the coverage area.